

Maine Coastal Program

Accomplishments—2000 and 2001



Supporting Maine's Coastal Communities

Maine's coastal zone extends three miles out to sea and inland to Augusta and Bangor. The Maine Coastal Program's (MCP) support for coastal communities in 2000-2001 included:

Encouraging Dialogue On Smart Growth

Maine's population is spreading out from town centers, creating unintended side effects such as degraded air and water quality. "Smart Growth" practices that revitalize coastal villages and conserve productive landscapes can lessen the fiscal, environmental and social costs of sprawl.

- MCP co-hosted the Fall 2001 Maine Smart Growth Institute, an intensive two-week professional development program attended by 50 planners, engineers, designers and local officials.

- MCP helped create and distribute the "Smart Growth Toolbox," a kit containing publications, videos, model ordinances and other resources to help professionals and volunteers plan for smart growth.

- Coastal Program funds for new software enabled the Southern Maine Regional Planning Commission to analyze existing development patterns and display a variety of future land-use scenarios—showing how different policies/standards would affect development. The software, "What If?," is being piloted in Kittery, Kennebunk and Arundel.

- The Greater Portland Council of Governments' Internet Mapping Service gained a new smart growth component, thanks to MCP funding. This technology will help municipalities analyze development patterns and determine the effectiveness of smart growth planning.

Funding Smart Growth Projects

To plan and implement good ideas, coastal municipalities need financial resources. MCP grants and State matching funds supported the following community projects during 2000 and 2001:

Supporting Local Fisheries

Waldoboro—commercial ramp and pier
Boothbay—master-planning for a lobster cooperative and shore access site

Redeveloping Waterfronts (U.S. EPA funds)

Lubec—assessing a former industrial site for conversion to a boatyard



Local growers sell fresh produce at the Cumberland Farmer's market.



More than 40 percent of the state's population lives in the 144 towns and unorganized territories that border the coast or tidal waters.

Hickman ©2001 Maine SPO

Drafting and Implementing Comprehensive Plans

Augusta, Bangor, Damariscotta, Dennysville, Eastport, Ellsworth, Gardiner, Gouldsboro, Kennebunk, Kennebunkport, Ogunquit, Saco, Sanford, Vinalhaven, Wells, Westport, Whiting and Winter Harbor

Training Municipal Staff and Volunteers

In rapidly growing coastal areas, municipal staff and volunteer boards are challenged to keep pace with new development. The Coastal Program provides training programs that help both professional planners and volunteers do their jobs more effectively. In 2001 the Coastal Program:

- Produced an informative booklet for municipal officials and interested citizens, "Marine Aquaculture—How the Public Can Participate in the Leasing Process," in partnership with the University of Maine Sea Grant Program.

- Provided funds to help Local Plumbing Inspectors (LPIs) learn about septic system installation techniques that prevent water quality degradation. The new field-based training received high marks from the first 165 attendees and will be used with an estimated 300 more LPIs over the next five years.

- Sponsored a workshop for 42 design professionals, state and local officials and builders on new construction techniques for use in floodplains.

Protecting Coastal Access

MCP renewed its commitment to increased coastal access for the public through support for the following activities in 2000 and 2001:

- Joined with the Maine Departments of Conservation and Transportation and the National Park Service to help the towns of Isle au Haut and Stonington purchase a half-acre shorefront property with a natural granite boat launch—ensuring water and island access for the public.

- Helped applicants for Land for Maine's Future grants meet the required local match for land acquisition. In 2001, Gardiner received matching funds from MCP to expand a downtown waterfront park along the Kennebec River.

- Awarded grants to help coastal towns rediscover historic public rights-of-way: Cumberland (Chebeague Island), Jonesboro, Freeport, Searsport, Woolwich, Tremont.

Addressing Unique Concerns

The Coastal Program has served as catalyst, innovator, and start-up funder for a variety of new approaches to coastal management and economic development, often responding to the unique needs of coastal communities and user groups. Recent projects have focused on the Washington County region and marine resource management:

- MCP supported a multi-year effort that encourages harvesters and regulators to share responsibility and authority for marine resource management. This "co-management" approach, now employed with sea urchins, lobsters, and soft-shell clams, may soon be used for scallops.

- MCP worked with the Sunrise County Economic Council to expand the Downeast region's economy in ways that complement its maritime heritage and natural resources. The Council secured funds for new business ventures, formed a marketing cooperative for tourism facilities, developed the Downeast Fisheries Trail (an interpretive tour of varied fisheries operations) and helped create a community development corporation.

Supporting Local Agriculture

Cumberland—Cumberland Farmer's Market
Kennebunk and Arundel—Kennebunk Farmer's Market

Strengthening Downtowns

Gardiner—improving access to downtown commercial buildings
Wells—creating a new town center

Improving Regional Planning

Trenton—managing Route 3 growth

Boothbay, Boothbay Harbor, and Edgcomb—cooperative planning for the Route 27 corridor

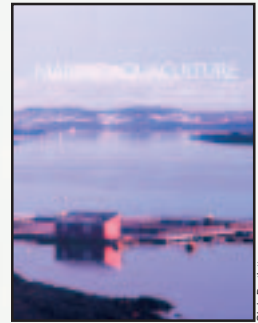
Boothbay Region—regional economic growth planning to retain a marine-related business



Greater cooperation between harvesters and regulators will improve management of valuable marine resources such as scallops.



Acquiring this boat launch in Stonington secured vital water access for the public.



The Maine Aquaculture Guide will help people understand and participate in the decision-making process for new leases.

Richard Avery

Sustaining the Health of Coastal Watersheds and Habitats

The Maine Coastal Program works in partnership with local organizations to protect and enhance the health of coastal watersheds and habitats.

Improving Coastal Water Quality

MCP works closely with coastal watershed groups to identify and eliminate sources of polluted runoff, develop watershed management plans and educate residents about coastal pollution.

- The Coastal Program awarded grants during 2000-2001 for the following community projects:

Coastal Mountains Land Trust for the Ducktrap Coalition River Keepers training program;
College of the Atlantic for a community watershed survey of Card Brook;

Sheepscot Valley Conservation Association for publication of three educational brochures and a membership and endowment fund campaign;

Friends of Royal River for a water-quality monitoring data report and public workshops;

Project SHARE for a watershed survey of Narraguagus River;

Wells National Estuarine Research Reserve for an analysis of shoreland development in the Ogunquit and Webhannet Rivers watersheds;

York County Soil and Water Conservation District for establishing the Great Works Watershed Coalition;

Friends of Scarborough Marsh for completing a watershed management plan;

Friends of Casco Bay for educational brochures on environmentally sound landscaping;

Time and Tide Resource Conservation & Development District and partner groups for a study of salmon river water quality during high runoff events;

Town of Brunswick/ New Meadows River Watershed Project to organize a Community Watershed Celebration, develop a project website and create a strategic plan.



Local volunteers monitor conditions in the New Meadows River Estuary.



Maine has made significant progress in reducing water pollution, but the health of coastal waterways and shellfish beds is still jeopardized by stormwater runoff from roads, parking lots, lawns and eroded areas.

John Nardelli ©2002 The Coastal Science Monitor

- MCP worked with the U.S. Environmental Protection Agency, Maine Department of Environmental Protection and local partners to launch a program called Nonpoint Education for Municipal Officials (NEMO). Presentations use watershed-specific photos and striking graphics to explain the crucial connection between land use and water quality. To date, NEMO has informed residents of Freeport, South Portland, Bar Harbor, and Rockport about how to control polluted stormwater through improved development practices. Increased Coastal Program support, in 2002 and beyond, will bring NEMO to more coastal towns.

- A new demonstration site along Portland's popular Back Cove walking trail shows visitors how to improve water quality by using plants to reduce and treat water runoff from paved areas. An MCP grant to the Casco Bay Estuary Project helped fund the site's signage, which informs visitors about characteristics of the Casco Bay watershed. MCP also sponsored a hands-on workshop and demonstration called *Safe and Sound: Yards and Gardens for a Healthy Seacoast* to boost the efforts of local watershed groups in Kittery, Brunswick and Belfast.

Protecting and Restoring Coastal Habitats

Maine's coastal zone has a diverse array of wildlife habitats—from rocky shores and estuaries to large forested tracts. The Maine Coastal Program helped sustain coastal habitats through the following efforts:

- A Coastal Program grant to the Coastal Conservation Association helped plan for removal of Smelt Hill Dam along the lower Presumpscot River. The dam's removal will improve the estuary's water quality and fisheries habitat.

- In 2001, the Gulf of Maine Council on the Marine Environment (a regional partnership to preserve and enhance the Gulf) received a \$430,000 grant for coastal habitat restoration from NOAA's National Marine Fisheries Service. A small portion of the grant funds, along with matching funds from the Maine Outdoor Heritage Fund, will support a coordinator at the Maine Coastal Program to help develop and carry out a coastal habitat restoration plan.

- An MCP grant enabled Maine Audubon biologists to help the volunteer organization Friends of Scarborough Marsh identify and prioritize wetland restoration projects—the first step in funding restoration projects.

- MCP funds helped Southern Maine towns and regional planners begin working to restore important sand beaches that are vulnerable to erosion. A new partnership, the Saco Bay Implementation Team, is working on a pilot restoration project in Camp Ellis. Lessons learned about beach replenishment, dune restoration and structural improvements in floodplain areas will be valuable to other Maine beach communities.



The Saco Bay Implementation Team is working to minimize erosion hazards at Camp Ellis (pictured above).

Stephen Dizon ©2001 Maine SPO



The Wells Bay Planning Committee is also working to enhance the quality of local beaches.

Hickman ©2001 Maine SPO

Encouraging Citizen Stewardship

The Coastal Program provides ongoing support to the dedicated local volunteers who help sustain the health of Maine's shores through monitoring efforts, community projects and cleanups. MCP also produces educational materials to inform residents and visitors about coastal resources and inspire good stewardship.

Monitoring Coastal Resources

- An MCP-funded Volunteer Coordinator at the Department of Marine Resources and a half-time Water Quality Coordinator at University of Maine Cooperative Extension conduct annual trainings for volunteers and support them during the monitoring season. In 2001, MCP funded two advanced training workshops—on fundraising and capacity-building—for volunteer monitors.

- Two new groups joined the Maine Shore Stewards coastwide network of citizen monitors in 2001: the Friends of Medomak Watershed in the midcoast, and the Great Works Water Quality Coalition in southern Maine.

- A new volunteer monitoring program launched in 2001 is surveying Maine's breeding horseshoe crab population at 15 locations between Brunswick and eastern Maine. With staff support funded by MCP, DMR coordinated more than 50 volunteers to conduct the crab counts. This survey, the first such study in more than 20 years, will provide the baseline for an ongoing monitoring program.

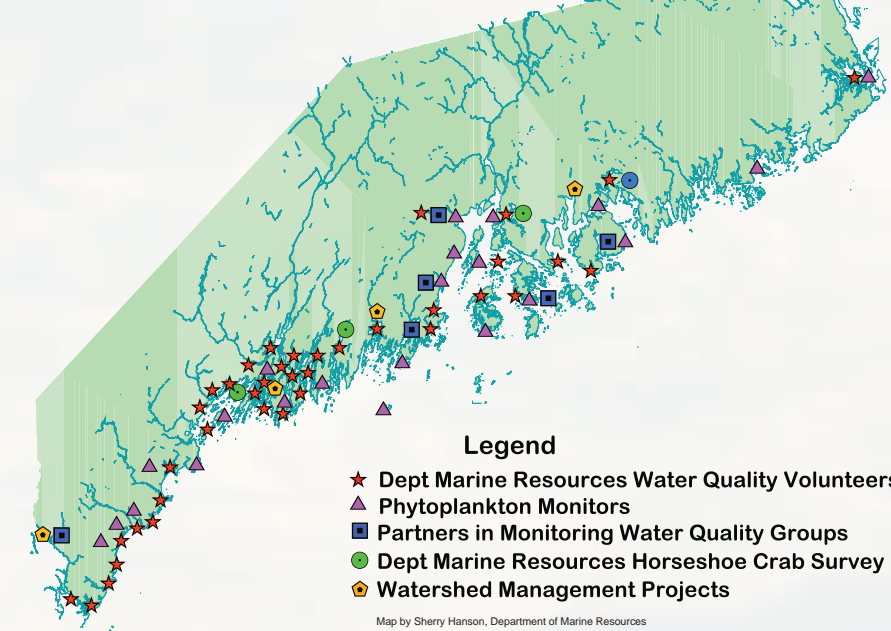


Volunteer monitors take part in Maine's new horseshoe crab survey.

Sherry Hanson ©2001

Maine Shore Stewards 2001

Maine's Coastal Volunteer Network



Maine Shore Stewards, a program created by MCP, University of Maine Cooperative Extension, and the Departments of Marine Resources (DMR) and Environmental Protection, celebrated its 10th year of providing technical and organizational support to citizen volunteers along Maine's coast. More than 1,000 citizens currently participate in three different monitoring efforts: DMR's shellfish sanitation/ water-quality monitoring; Clean Water/Partners in Monitoring; and Phytoplankton Monitoring. The data they collect help to solve coastal pollution problems and restore valuable clam flats.

Supporting Local Volunteers

- Penobscot Bay Stewards, an adult education and community service program, now has almost 100 alumni who contribute volunteer hours in exchange for educational seminars, course work and field trips. The class of 2000 volunteered more than 450 hours on projects such as watershed mapping and monitoring, an educational video and planning for a coastal botanical garden.

- MCP helped launch a new Midcoast Stewards program in 2001, collaborating with the Knox-Lincoln Soil and Water Conservation District. Volunteer service projects in this region included trail management, loon protection efforts and a children's water-awareness activity day.

- Each fall for nearly two decades, the Coastal Program has organized a Coastweek celebration and coastwide cleanup. During Coastweek 2001, 2,348 volunteers covered 167 miles of coastline and gathered 15,082 pounds of marine debris. Cigarette filters, plastic packaging and fishing-related materials continue to top the list of trash collected. To help reduce this debris at the source, MCP staff launched a new Coastweek activity—*Making A Debris-free Lunch*. Students at ten schools were asked to consider and discuss alternatives to product packaging, substituting containers that can be reused or recycled.

- Jennifer Sperling of Wells High School placed first in MCP's Coastweek poster contest. The winning image, along with the work of 25 other contestant finalists was part of a traveling exhibit during Fall 2001.



Jennifer Sperling's painting of a coastal wetland won first place in MCP's 2001 Coastweek poster contest.

Educating Residents and Visitors

- Following release of its popular 1998 poster *Undersea Landscapes of the Gulf of Maine*, the Coastal Program collaborated with the Gulf of Maine Aquarium to develop a complementary website in 2001. Three-dimensional bathymetric charts and stunning underwater photography depict species and habitats in the Gulf of Maine. Sponsored by MCP, the educational site (www.gma.org/undersea_landscapes) received additional support from the Aquarium, Maine Outdoor Heritage Fund and five other coastal organizations.



The new Undersea Landscape web site offers rare glimpses of Maine aquatic life in its native habitat, such as this lobster, *Homarus americanus*.

©2001 Curran



The Sea and Shore radio program informs the public about coastal topics.

- For the third year running, MCP and collaborators Maine Sea Grant and the Wells National Estuarine Research Reserve produced *Sea and Shore*, a series of radio spots about coastal resources. The spots feature such topics as alewife migrations, seabird restoration, and beach erosion.

Creating New Tools for Coastal Management

Technological advances provide new ways to study, map, and manage coastal and marine resources. In 2000 and 2001, MCP supported the sharing of valuable management tools through the following activities:

Conducting Coastal Research

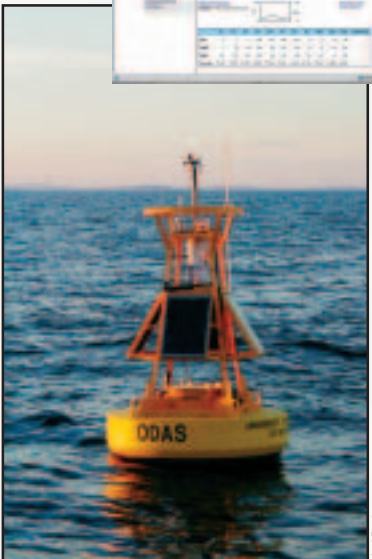
- MCP helped guide the Penobscot Bay Marine Resources Collaborative, an ambitious five-year effort to collect and integrate oceanographic, ecological and fisheries data and apply them to Bay management. Funded by the National Environmental and Satellite Data Information Service (at the National Oceanic and Atmospheric Administration) and administered by the Island Institute, the project succeeded in gathering and analyzing a wealth of new information and demonstrating the use of remote sensing in coastal management. The project's database can be accessed at <http://www.penbay.net/> and from the Maine Office of GIS at <http://apollo.ogis.state.me.us/projects/penobay/data.asp>.
- The Coastal Program funded a two-year research project that field-tested the effectiveness of newly mandated stormwater management techniques. By monitoring a stormwater treatment system during 14 different types of storm events, researchers and water quality managers gathered helpful information about the removal of pollutants such as phosphorus, nitrogen, suspended solids, cadmium, copper, lead and zinc.

Making Data Accessible

- Remotely sensed data, derived from satellites and aerial photography, can provide valuable information to communities and individuals concerned with sustaining healthy coastal habitats. Working with NOAA's Coastal Services Center, MCP produced a CD—*Using Remote Sensing to Address Coastal Management Issues*—with maps that show land-use and land-cover changes between the mid '80s and the mid '90s in each of Maine's coastal municipalities. Data from the CD can be used for local and regional planning. The CD highlights five Maine case studies that demonstrate the value of remote sensing in coastal management, and includes tutorials on remote sensing and GIS.
- Maine Coastal Program staff played a pivotal role in creating the Gulf of Maine Ocean Observing System (GoMOOS)—which transfers a comprehensive suite of real-time and archived data from the Gulf of Maine to the Internet (www.gomoos.org). Fishermen, shippers, recreational boaters, search-and-rescue personnel, educators and interested citizens can use this readily accessible information to increase safety, enhance business practices and improve research.



In October 2001, Governor Angus King (left) honored long-time MCP staff member Josie Quintrell with an employee achievement award for her work to establish GoMOOS, as SPO director Evan Richert (right) looked on.



GoMOOS gathers data from satellites, 13 buoys located throughout the Gulf of Maine, and four "Codar" radar-monitoring devices.

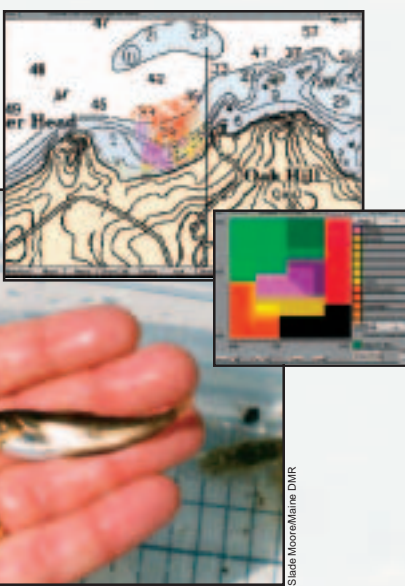
Mapping Coastal Resources

- The Coastal Program is working to improve the capacity of regional agencies and municipalities to use Geographic Information Systems (GIS). Current obstacles to its increased use include multiple data sources, gaps in statewide data layers, difficulty transmitting data from state agencies to local and regional users, and lack of consistent data quality and specifications. The Coastal Program provided funding and staff support for a group of stakeholders to begin formulating a better statewide GIS. That group recently presented its proposal, "A Program for Building the Maine Geographic Library," to the Maine Legislature.
- State regulations do not offer specific protection to Maine's sediment bluffs. Under this "buyer beware" scenario, builders, developers, homeowners and town officials need further guidance on potential bluff hazards. MCP provided support for the Maine Geological Survey to map most of Maine's coastal sediment bluffs and rate them for stability and landslide potential. Now 50 color maps of coastal bluffs hazards—and a companion map series identifying landslide hazards—can be ordered online at <http://www.state.me.us/doc/nrimc/pubedinf/pubs/picoast.htm#bluff>.



New maps created by the Maine Geological Survey will help builders, developers, homeowners, and town officials better understand the hazards of unstable shore areas.

- MCP funding helped the Department of Marine Resources create marine habitat maps that identify associations between juvenile fishes and the habitats they occupy. Such maps assist fisheries managers in considering ecosystem approaches to management. The study integrated the use of traditional and more technologically advanced research tools to generate new information about Maine's nearshore habitats in Penobscot Bay, Saco Bay and the Sheepscot River (for site maps and data tables on Pen Bay see http://www.state.me.us/dmr/ecologystudy/juvenile_fish_habitat.htm).



Underwater maps (upper right) are helping scientists better understand the relationship between juvenile fishes, such as the white hake shown above, and their habitats.

2000-2001 Maine Coastal Program Staff

Todd Burrowes, Policy Development Specialist/Federal Consistency Coordinator
Paul Dest, Coastal Access Coordinator and Communications Coordinator (to 12/00)
Mary Ann Hayes, Senior Planner, Land Use
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Josie Quintrell, Policy Development Specialist/GoMOOS (to 12/01)
Theresa Torrent-Ellis, Coastal Educator and Communications Coordinator

2000-2001 Publications

Smart Growth

Healthy Highways (with Kennebec Valley Regional Planning Commission)—minimizing traffic congestion through smart growth planning

Technical Assistance Bulletins for Maine Towns (series of guides to help towns review development proposals) Series includes:

Noise
Architectural and Historical Resources
Buffers
Easements
Good Neighbor Standards
Groundwater
Infill Development
Parking and Access Management
Stormwater

Public Access

Coastal Water Access Priority Areas for Boating and Fishing (with Maine DMR) includes maps and text supporting the need for additional public access in coastal Maine

Marine Resource Management

Marine Aquaculture: How the Public Can Participate in the Leasing Process for Marine Aquaculture Farms in Maine

Creating an Alternative Approach to Fisheries Management: Proceedings of a Workshop at the 2001 Maine Fishermen's Forum

Brochure Series on Lobster Zone Councils—"Maine Commercial Lobster Harvester Information;" "Lobster Limited Entry Zones;" "Maine Lobster Apprentice Program"

Habitats

Wetlands in Maine—an 11-page guide to types of wetlands found in Maine

Directories

Coastlinks: A Resource Guide to Maine's Coastal Organizations

Maine DMR Volunteer Program—a guide to volunteer opportunities at DMR

Brochures

Coastweek: Caring For Our Coast

Maine's Coastal Watersheds

Newsletters

Maine Coastline—news from the Maine Coastal Program, winter and summer

Shore Steward—news for volunteer monitors and coastal watershed groups, quarterly

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Maine Coastal Program

Accomplishments—2000 and 2001



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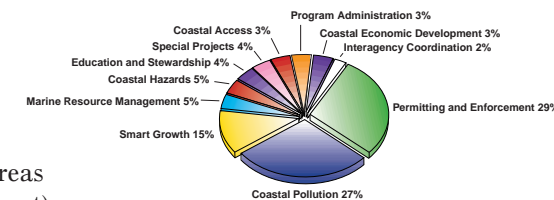
EVAN D. RICHERT, AICP
DIRECTOR

March 2002

Each region and town along our over 4,000-mile stretch of shoreline has unique characteristics and specific management needs. The Maine Coastal Program, housed at the Maine State Planning Office, supports towns, conservation organizations and economic development groups in their work to sustain coastal resources and enhance the maritime economy. Each year, we distribute more than \$2 million in federal funds—

matched by an investment of state and local resources—

Maine Coastal Program 2000-2001 Budget by Topic



This brochure highlights many of our accomplishments over the past two years. We hope that it will spark thoughts on how we might work with your town or organization to improve management of Maine's coastal resources. If you have ideas to share, or would like more information about any of the projects or products mentioned in this report, please call us at 207-287-1486, e-mail lorraine.lessard@state.me.us, or visit the Coastal Program website at <http://www.maineoceanic.org>.

Kathleen Leyden

Kathleen Leyden, Director
Maine Coastal Program



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